Deeper customer insight
Understanding today's complex shoppers

An IBM Institute for Business Value executive brief

In association with:

National Retail Federation
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Introduction

In today’s evolving marketplace, retailers face a “world of extremes” characterized by unprecedented complexity, intense competition and market polarization. Customers are increasingly demanding relevant value propositions that meet their individual needs and preferences and will seek out those retailers able to provide them. This new environment requires a shift in thinking from “bell curves” to “well curves” – as growth and perceived customer value migrate to opposite ends of the competitive spectrum.

Retailers thus need to become truly customer-centric in strategy and execution to avoid being overtaken by more sophisticated competitors. Customer centricity starts through a deeper understanding of the multiple dimensions and drivers of target customers’ shopping decisions. By developing unique, proprietary insights about their customers, retailers can create a more tailored and relevant shopping experience which sets them apart from the competition.

How are customer value drivers fragmenting? What do today’s shoppers want in different situations? The IBM Institute for Business Value recently conducted new research among U.S. shoppers in several product categories to investigate different customer “needs states.” In this paper, we present a selection of our findings to highlight the value of new and innovative analytical techniques in building deeper customer insights.

Five “megatrends” for 2010

In a previous in-depth report on the future of the retail marketplace, we identified five deep-seated trends that are reshaping the business environment (for more details, see the Related publications section at the end of this document for the IBM executive brief “The retail divide: Leadership in a world of extremes”):

- **Customer value drivers fragment.** Micro-market segments are resulting from pronounced shifts in demographics, attitudes and patterns of behavior. Customers are “trading up” to premium brands and simultaneously “trading down” to low-cost providers.

- **Gatekeepers become more guarded.** Overwhelmed and time-strapped customers are exerting greater control over their interactions with businesses. Empowered by new technology and regulation, they will more aggressively protect their identities and personal data from “me-too” marketing tactics.
• *Information exposes all.* Customer choices are being shaped through unparalleled access to information – virtually wherever, whenever and however they want it.

• *Megaretailers break the boundaries.* The world’s top retailers are rapidly expanding across geographies, formats and product/service categories, blurring market segments and devouring market share.

• *Partnering becomes pervasive.* Leading companies are creating flexible “value networks” based on strong integration and collaboration with alliance partners. Competitors will be challenged to match the responsiveness and agility of these “connected” market leaders.

These megatrends are driving the industry to a “world of extremes” where customer diversity and individualism are pervasive, and traditional segmentation is rendered inadequate. Customers demand low prices for basic goods, but pay premiums for products that matter more to them personally. Consequently, those best positioned to grow and succeed will be huge megaretailers on one end of the spectrum and targeted retailers on the other, while undifferentiated companies, lost in the middle, risk fading into irrelevance.

Corporate thinking thus needs to switch from “bell curves,” where firms try to serve a generic mass market but do not meet anyone’s needs particularly well, to “well curves,” where companies drive growth by applying distinct models in each part of their business to deliver the greatest value to explicitly defined groups of customers (see Figure 1).

**Figure 1. The “world of extremes” – a polarizing marketplace.**

Source: IBM Institute for Business Value. The “well curve” concept was described in the following article: Pink, Daniel H. “The Shape of Things to Come.” Wired. May 2003.
Driving innovation through deeper insight

To succeed in this world, retailers need to craft and execute upon a truly customer-centric value proposition (or a well-defined set of them) that addresses the needs of their target customers. The first step is to embrace and understand today’s shoppers and how their needs are evolving.

Recalling our first megatrend, customer value drivers are inherently multidimensional and getting more complex all the time (see Figure 2). Traditional classifications (largely based on demographic characteristics) are increasingly inadequate to accurately predict whether and to what degree new retail initiatives (for example, in marketing, merchandising, and store services) will succeed in generating the desired customer response. Retailers need to develop deeper customer insights through more sophisticated approaches to segmentation and innovative analytical models.

Figure 2. Understanding today’s multidimensional shopper.

Source: IBM Institute for Business Value analysis; partially adapted from Retail Forward and “Retailing”, Dale M. Lewison.
To cast greater light on these issues, we surveyed over 1600 U.S. shoppers to explore the following questions:

- How do customer value drivers vary across product categories and across shopping occasions?
- Why do customers choose one retailer over another for their shopping needs?
- How do customer views on the ideal shopping experience vary across different shopping occasions?

Survey methodology
The IBM Institute for Business Value conducted an online survey of a representative sample of U.S. consumers in October 2004. Members of the Greenfield Online panel were contacted and qualified to take the survey based on whether they had recently gone shopping for one of the following types of products: groceries (within the past 2 weeks), apparel (within the past 3 months) or consumer electronics (within the past 12 months).

Respondents answered questions relating to the following topics (as well as others):

- The specific reason for the shopping trip (such as “monthly or weekly grocery stock up” or “apparel shopping trip to replace basic items”)
- The reasons they chose that particular store (for example, “easy to find what I need” or “I know I am getting a good deal”)
- The services and features, across different stages of the shopping process, that a retailer could offer that would make the customer more likely to choose that store on a similar shopping occasion (such as “ready access to store staff” or “ability to track spending while shopping”)
- Their attitudes toward brands (for example, “I don’t care about brands” or “Brands give me emotional satisfaction”)
- Their perceptions of their own values and personality characteristics (such as being “creative” or a “bargain hunter”).

Most questions were in a standard multiple choice or rating-based format, and those surveyed were asked to respond only to questions for a single product category.

Figure 3. Key survey respondent characteristics.
**Focus on shopping occasions: Three product examples**

In the sections that follow, we will highlight the distinct shopping occasions represented by our sample for each of the three product categories and explore how their preferences vary by occasion. For questions where respondents were asked to rate the importance or value of a given item, we used a “top box” analysis, comparing the results of those choosing six or seven on a seven-point scale in order to focus on those shoppers who felt most strongly about their expressed preference.

**Grocery**

**Shopping occasions and motivations**

The vast majority of grocery shoppers (not surprisingly) identified one of two specific reasons for their most recent shopping trip: to do a weekly or monthly stock up of grocery items” (58 percent of respondents) or to “quickly run in and replace a few key items” (23 percent). To simplify, we will refer to these two occasions as “replenishment” and “convenience,” respectively.

Both groups of shoppers’ number one reason for choosing the particular store was the convenience of the store location. However, replenishment shoppers expressed greater concern with knowing that the retailer “carries the right brands,” “products are reliably in stock” and they can get “all their shopping done in one place.” On the other hand, convenience shoppers were more concerned with the speed of their trip and somewhat less concerned with “getting a good deal” (see Figure 4a).

**Valued shopping services and features**

For both replenishment and convenience shoppers, “accurate prices” and “clear and easily understandable signage” were overwhelmingly on top on the list of shopping features they deemed very important, as was “no hassle return policy” in after-sale features (see Figure 4b). However, deeper delving revealed differences that aligned to the shopping occasions in areas such as promotions and checkout. Replenishment shoppers’ greater concern with “getting a good deal” was further reflected in their higher interest in “receiving promotions” at checkout and after the sale. Convenience shoppers’ need for speed was also demonstrated by their slightly higher preference for “self-service checkout.”
Implications for grocery retailers

While grocery shoppers share many basic needs that retailers must satisfy to remain competitive, companies also have an opportunity to differentiate themselves by offering more distinct shopping experiences targeting the preferences of specific customer needs states. For instance, some grocers are testing new layouts including a “get in and out” zone at the front of the store – stocked with key items that can be readily accessed and purchased – to help them attract and retain convenience shoppers.

On the other hand, grocers need to maintain an environment where vital replenishment shoppers can do “all their shopping in one place” and feel good about the value they receive. This is largely about doing the basics right: maintaining high in-stock rates on the products shoppers care most about; excelling in the core

Note: *Response of 6 or 7 on a scale from 1-7, where 1 is “not at all important” and 7 is “extremely important.”
areas of the store (such as produce, meats, deli and bakery) so that shoppers are not encouraged to “split their basket” across different stores; making it easy for customers to take advantage of relevant promotions and rewards; and being clear about the price/quality proposition offered by the store.

**Consumer electronics**

**Shopping occasions and motivations**

Our survey uncovered four major consumer electronics shopping occasions which accounted for about two-thirds of respondents in this category:

- Browse new technologies (18 percent)
- Find a specific accessory (17 percent)
- Upgrade equipment or technology (16 percent)
- Replace a broken item (15 percent).

Similar to grocery shoppers, consumer electronics shoppers' top reason for choosing a particular store was the convenience of its location (once again proving the cliché correct). However, notable variations in value drivers exist just below this level (see Figure 5a).

Shoppers looking for a specific accessory were concerned that the store “carries the right brands,” has a “broad selection” and is “easy to shop.” In contrast, those seeking to replace a broken item wanted assurance that “products are always in stock,” in addition to “ease of finding the item.” For them, selection and brands were less important. On the other hand, buyers looking to upgrade their existing equipment were focused on getting information. In contrast to the other three groups, they selected “store associates are knowledgeable and give good advice” and “provides good information about their products” among their top 10 reasons for choosing the particular store. Meanwhile, browsers of new technology placed strong emphasis on the store’s “product selection” in terms of both breadth and depth, and they especially wanted a store that is “fun/exciting to shop.”

**Valued shopping services and features**

Across the four groups, “accurate prices” were overwhelmingly the top feature consumer electronics shoppers expected in a store, followed closely by “knowledge of product availability.” Retailers that don’t meet these fundamental needs risk dissatisfying a wide range of customer segments.
Looking across other top-rated features, we found that shoppers’ preferences very much aligned with the reason they chose a particular store (see Figure 5b). For instance, upgrade shoppers wanted an environment where they could get in-depth information and good advice. On the other hand, browsers looking to try out new technologies were very interested in exciting displays and being able to touch and experience the product as they would use it. Notably, browsers also appeared to favor receiving promotions based on their previous shopping history.

All of the shopper groups rated “receiving discounts/coupons for my next shopping trip” at the top of their list of checkout features (from 40 percent to 55 percent gave it a top box rating) – especially interesting, given that electronics retailers typically do not offer such promotions at checkout. Also, in sharp contrast to grocery and apparel shoppers, multiple groups of electronics shoppers were very open to “follow-up contact from the store to see if I am satisfied with my purchase” (top box ratings from 30 percent to 50 percent of various groups).

**Figure 5a. Consumer electronics – Reasons for choosing the particular store.**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has a broad selection of products</td>
<td>48</td>
</tr>
<tr>
<td>Carries the brands I want/like</td>
<td>47</td>
</tr>
<tr>
<td>Products are always in-stock</td>
<td>28</td>
</tr>
<tr>
<td>Easy to find what I want</td>
<td>26</td>
</tr>
<tr>
<td>Provides good information about their products</td>
<td>13</td>
</tr>
<tr>
<td>Store associates are knowledgeable and give good advice</td>
<td>19</td>
</tr>
<tr>
<td>Fun/exciting place to shop</td>
<td>14</td>
</tr>
<tr>
<td>Has a deep selection of products</td>
<td>18</td>
</tr>
<tr>
<td>Browse new technologies (n=92)</td>
<td>45</td>
</tr>
<tr>
<td>Find a specific accessory (n=85)</td>
<td>35</td>
</tr>
<tr>
<td>Upgrade equipment or technology (n=84)</td>
<td>28</td>
</tr>
<tr>
<td>Replace an item that broke (n=76)</td>
<td>21</td>
</tr>
</tbody>
</table>
Implications for consumer electronics retailers

Not surprisingly, due to the complex nature of the products, consumer electronics shoppers appear to have more variation in needs across different shopping occasions. Thus, a key challenge for retailers is being able to identify the needs state of customers when they walk through the door – whether they are browsing new technologies, looking for accessories, seeking to upgrade, eager to replace something they already have – and to serve them most efficiently and effectively. One possible approach is to encourage and train customers to select different “paths” through the store based on their particular needs that day.

Note: *Response of 6 or 7 on a scale from 1-7, where 1 is “not at all important” and 7 is “extremely important.”
Some of the best examples of occasion-based selling are Internet retailers. Gift seller Red Envelope asks customers a series of questions about the occasion to help them identify what they are looking for and to offer suggestions. Amazon similarly offers advice, provides access to reviews and additional product information, and shows related items that buyers with similar interest found useful or helpful.

Many of the leading practices of online retailers have yet to be replicated in the brick-and-mortar world. Leading stores will find ways of identifying customers’ needs as they walk in the store. A kiosk at the store entry could allow customers to make a selection that identifies their needs and then directs them to the appropriate department or customer service area. Store associates trained to ask a few simple questions, such as how customers plan to use the product and how familiar they are with the technology, would be better equipped to serve them directly or with assisted selling tools (such as a portable information system). And new self-service tools could help guide customers through the buying process, providing detailed product information, peer reviews and recommendations.

**Apparel**

**Shopping occasions and motivations**

There is great variation in the reasons behind apparel shoppers’ most recent shopping trip. The top occasion was to “replace basic wardrobe items” (30 percent), while the remaining shoppers were divided into at least eight other groups, including “purchase work-related clothing” (11 percent), “wanted something new and different” (9 percent) or “purchase a gift” (7 percent). Below, we focus on two of these occasions which illustrate some of the sharpest differences.

In the case of apparel, the top reasons for choosing the particular store were “convenient store location” and “ability to get a good deal.” But as with grocery and electronics, there can be notable differences in secondary value drivers (see Figure 6a). Those shopping for *work-related clothing* wanted an “efficient, easy shopping experience” and the ability to “shop for other things at the same time.” In contrast, shoppers looking for *something new and different* were more concerned with “excitement,” “fashion,” “brands” and “quality.”

**Valued shopping services and features**

Looking at desired store services across various phases of the shopping process, we found *something new and different* shoppers were especially interested in value-added features such as “summon sales help from the dressing room,” “customized products,” “receiving promotions at checkout” and “access to more convenient
checkout areas” (see Figure 6b). In contrast, work-related shoppers appeared to be more focused on “access to information on product availability” and “merchandise displayed so that it is easy to assemble outfits or create mix-and-match combinations.”

Figure 6a. Apparel – Reasons for choosing the particular store.

Figure 6b. Apparel – Valued shopping services and features.

Note: “Response of 6 or 7 on a scale from 1-7, where 1 is “not at all important” and 7 is “extremely important.”

Implications for apparel retailers

As illustrated by our two example shopping occasions, apparel retailers have an opportunity to adopt novel approaches to merchandising and marketing to better attract and serve customers with different needs states. Work-related shoppers may be amenable to some of the “usage/needs-based” selling models described for consumer electronics that could efficiently help identify what they need and where to find it. On the other hand, something new customers might respond positively to a store experience that conveys excitement and newness, allows them to take their time and browse, offers more services and gives them purchasing rewards to be used on future shopping trips.

For some apparel retailers, their alignment to customer needs state will be (or should be) very much inherent to their merchandise assortment, store layout and service delivery. For instance, think of a specialty retailer that focuses on helping men or women put together work-related outfits, or one that offers a wide range of innovative products centered on a given lifestyle. For others, the challenge is greater, as they must determine how to satisfy different customer segments and needs states within a given store format. Such retailers will want to design flexible store experiences that attract both the convenience-oriented buyer of basic items and those for whom clothes shopping is a group social activity – not to mention buyers of gifts or items for young children, bargain hunters and other types of shoppers.

In general, for any product category, the competitive imperative is to offer customers a more “customizable” shopping experience through selling models not based merely on products and features, but designed to target specific customer shopping occasions and needs states. To help prioritize what shopping services and experience elements will best drive the desired customer response, retailers must build a deeper level of customer insight.

Consumer decision process modeling

As the preceding survey results show, customer value drivers are likely to vary in important ways from occasion to occasion, or across different customer needs states. This conclusion is probably not surprising to most experienced marketers and retailers, but companies have historically lacked clear means to benefit from such insights, for three main reasons:

1. Difficulty in analyzing, at a sufficiently granular level, the numerous factors that truly make up the customer buying decision;
2. Difficulty in prioritizing the importance of those factors as part of crafting new shopping experiences and marketing strategies; and
3. Inability to efficiently and effectively deliver personalized services and store experiences to vast numbers of customers, at scale.
The last challenge is beyond the scope of this paper (but will be addressed in a future study by the IBM Institute for Business Value). The other two, however, will be discussed here, as they can be addressed through a new analytical technique known as Consumer Decision Process (CDP) modeling.

CDP modeling applies sophisticated quantitative analytics to consumer decision-making processes. It provides insights into the numerous factors that truly drive 'why' consumers act in a certain way – insights that are missing from separate qualitative and quantitative research studies. This is accomplished in five integrated phases (see Figure 7).

**Figure 7. CDP: More than traditional quantitative market research.**

CDP begins with qualitative market research but goes deeper to avoid its pitfalls. Traditional qualitative techniques – such as focus groups, interviews and ethnography – have been the primary means of understanding "why" customers act. However, the outputs of these approaches are open to subjective interpretation, are typically based on limited sample size and scope, and offer little or no quantitative prioritization of customer motivations. As a result, they cannot provide the objective insight that is necessary to confidently develop and implement strategic programs at scale, and thus to drive major gains in revenue growth and customer loyalty.
Conversely, traditional quantitative research techniques often overlook the possibly hundreds of elements that constitute “why” customers choose to shop at a given store or if they make a purchase. Vast data warehouses of consumer demographics, pattern analysis on purchase transactions, and segmentation – whether demographic, attitudinal or psychographic – can tell companies about customers’ surface characteristics and what, where and when they buy, but not about what really drove their decisions in specific circumstances.

Through CDP modeling, retailers can deconstruct customer patterns of behavior into the thousands of tactical elements that affect their decisions: from personal attitudes to competitive prices, from advertising messages to salesperson tactics, and from individual emotions to product characteristics. This approach enables objective measurement of how much impact any given element has on the final decision.

To illustrate, we applied this technique to the results of our survey within each product category. In the apparel example discussed below, we chose store format preference as our dependent variable, asking why respondents chose a particular type of store in their most recent shopping trip (see Figure 8). The CDP model is built by creating groupings of all the questions in the survey. Statistical analysis enables us to identify the “best fit” relationships between the groups, as well as determine their relative strengths. And, we can identify at what step in the process each of the elements has its greatest impact on the customer’s target decision.

**Figure 8. Consumer Decision Process map for apparel.**

![Figure 8. Consumer Decision Process map for apparel.](image)

From this simple analysis, it is evident that the most important drivers of the target decision (choice of store format) were their reason for selecting the particular store (0.89 score on a scale of -1.0 to +1.0) and the purpose of their shopping trip that day. This result is to be expected – the key question is what other factors influence customers’ thinking on these immediate drivers? Of the various elements of the shopping process, the in-store shopping services and features offered by retailers had the most significant impact (0.88 score).

Consequently, we can infer that the imperative for apparel retailers is to align their in-store experience – including merchandising, selling, layout and value-added services – with the brand proposition perceived by their target customers (so that these customers associate their reasons for shopping with that particular store). Factors such as where and how customers obtain information before going shopping and their attitudes toward brands have much less of an impact, and should not be the focus of the retailer’s investments and change initiatives.

The CDP model also provides us with individual scores for each of the items within the groups (in this case, individual survey questions) so that we can further isolate the specific elements that have the greatest impact (see Figure 9). Within the group of in-store shopping services and features, some elements are likely to be basic requirements (such as accurate prices), but some may offer opportunities to differentiate (perhaps through better ways to access store staff to ask a question or to provide information on promotions being offered). In contrast, in-store online shopping rated markedly lower than the other elements and should treated as less significant.

Figure 9. Relative importance of individual elements.

CDP analysis provides a more holistic view of customers' decision-making processes than is possible from traditional exploration of the frequency scores from survey responses. In the analysis discussed earlier, we also saw fragmentation of the value drivers by looking at the varying preferences across shopping occasions, but were only able to look at individual elements of the shopping experience in isolation, rather than in relationship to each other.

Ultimately, the value of CDP modeling comes when individual retailers use it to understand how the key components of customer preferences work in concert to determine buying conduct, in specific situations relevant to their business. At this level, retailers will have the ability to appropriately adjust elements of marketing strategies and the shopping experience in order to drive customer acquisition, retention and, where feasible, increased wallet share, as shown by the following example.

**CDP in action: Shaping retail selling and operational strategies**

A leading retailer was quickly expanding across the U.S. and could foresee issues with growing market share when it reached the saturation point. Although the company already used transactional data mining, attitudinal segmentation and tracking surveys as sources of customer insights, it needed a deeper understanding of customer decision-making within four high-potential merchandise categories to prepare proactive steps to grow market share before expansion slowed. In addition, the retailer also wished to reprioritize store operations, merchandising and human resources policies to keep up with a rapidly growing employee base.

CDP analysis yielded two targeted repositioning strategies. The first was better customer education. In each category, significant market share was going to specialty retailers that focused on people-driven assistance and high levels of customer education early in the process – where customers have identified a need, but are not ready to buy. The second strategy focused on enhancing post-purchase service messages. CDP modeling found that, for the purchase of big-ticket items, consumers were strongly factoring in post-purchase expectations (such as installation, warranty) and the strong post-purchase reputation of specialty stores was putting the retailer at a disadvantage.

From an operational perspective, CDP analysis found that the role of in-stock inventory for big-ticket items differed significantly by product category and had important implications for stock management and merchandising. For one category, taking home the purchase the same day was absolutely necessary and more than 60 percent of consumers would go to a competitor if take-home inventory was not available – thus, focusing on inventory availability for this merchandise was an imperative. In another product category, having the product to take home on the same day was not required, but having sample inventory displayed for visual comparison would make or break the sale with 80 percent of consumers. Therefore, the retailer focused on improving product layout and enhancing in-store display capabilities in this category.
Conclusion

Retailers can no longer think of their customers in traditional, demographic-based segments and successfully deliver a differentiated experience. Customers do not walk into their favorite store simply as a “35-year-old woman who works full-time and has two children at home.” In fact, they walk in with a specific shopping mission, driven by fundamental, personal values and attitudes. Customers who share the same surface characteristics may well have meaningfully different needs and preferences, particularly if their basic motivations for shopping that day are different.

Developing deeper insights through more sophisticated approaches to segmentation and innovative analytical models, such as CDP, is a key step toward creating a more customer-centric shopping experience. Retailers need to know how their customers make decisions, why they shop there, and what their needs and preferences are for a given set of shopping occasions.

Armed with these insights, retailers can develop merchandising, marketing, and store services strategies that are better aligned to their target customers. Going forward, advanced retailers will develop innovative ways to identify these different types of needs states before or while shoppers walk in the store. The more tailored and personalized the experience that retailers create for their customers, the greater the differentiation from their competitors and ultimately, the greater the success.

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